**United States** 

OMB Control No. 2080-0021 Approval expires 12/31/2010



## **ENVIRONMENTAL PROTECTION AGENCY**

# Washington, DC 20460 Laboratory DMR-QA Evaluation Study 30 Laboratory Performance Evaluation

Office of Enforcement and Compliance Assurance (These data are collected under the authority of the Federal Water Pollution Control Act.)

#### **NPDES Permittee Data Report Form**

Due August 20, 2010	Attention: Follow the page to complete this eva			<u> </u>	DES Permit Number 5001	Permit Ex	xtension
Permittee name GRA	ANITE POINT TANK FAR	RM					
Current Permittee mai	ling address PO BOX 19	96247					
City ANCHORAGE			i i	State AK	Zip	o Code 9951	9
Phone Number	+1 (907) 276-760	00	FAX Number		+1 (907)	263-7321	
e-Mail MMJONES@	CHEVRON.COM						
For DMR-QA Study 30, Received PT Sample Yes 🛛 No 🗀	]	Submitted Complete by July 2, 2010 Yes No	e and Accurate	Data	Received July 23, 20 Yes	a Graded Rep 010	port by
		on by Permit Holder of (as per 40 C.F.R. Section 12			ive		
designed to assure tha who manage the syste knowledge and belief, routinely performs the (NPDES) permit. Neithe laboratory before we re	of law that this document and t qualified personnel properly m, or those persons directly retrue, accurate, and complete. See analyses to produce compler I nor any of my subordinate eported our results to the U.S. and imprisonment for knowing	y gather and evaluate the esponsible for gathering . Each reported value wa liance monitoring data r es compared our results .EPA. I am aware that th	e information su the information as produced fron equired under o with results fron	bmitted. Base n, the informati n a single analy ur National Po n independent	d on my inquiry ion submitted i ytical run using Ilutant Discharg analyses condi	y of the person s, to the best of the analytical s ge Elimination S ucted by us or a	or persons f my system that System any other
Name of Certifying (	Official DALE HAINES	por-yell	Title	OPERATIO	ONS MANAG	ER	
Signature	Dale Han	λ		(4.80.00)	Date	08/17/0	8
Address, phone number an	d e-mail of certifying official are rec	quired if different from abov	e.				
Address 3800 CE	NTERPOINT DRIVE SUI	TE 100		Phone No.	+1	(907) 726-760	00
City ANCHORAGE	s	State AK Zip C	ode 99503	e-Mail	DALEAH@C	CHEVRON.CO	ОМ

United States Environmental Protection Agency

#### **United States**

# **ENVIRONMENTAL PROTECTION AGENCY**

## Washington, DC 20460

Laboratory DMR-QA Evaluation Study 30
Laboratory Performance Evaluation

Office of Enforcement and Compliance Assurance (These data are collected under the authority of the Federal Water Pollution Control Act.)

Permittee name GRANIT	Permittee name GRANITE POINT TANK FARM State AK						it Extension		
Identification	on of all CHEM, MICRO and WET lal	oorat		G31500 did anal		his perm	nit		
Name of Laboratory	Address of Laboratory	U.S	S. EPA Lab Code		ab Analys box(es) that		Lab Type*		
			Code	CHEM	MICRO	WET			
NORTHWESTERN AQUATIC SCIENCES	PO BOX 1437 NEWPORT, OR 97365	OR0	0029			$\boxtimes$	Commercial		
SGS NORTH AMERICA	200 WEST POTTER DRIVE ANCHORAGE, AK 99518	AK0	00971	$\boxtimes$			Commercial		
*Lab Types:	*Lab Types: C = Commercial F = Federal G = Local Government I = Industrial O = Other S = State								

If you need additional space, please make a copy of this page for additional laboratories.

## Chemistry/Microbiology Analyte Checklist

DMR-QA Study 30

			Laboratory's Graded Result		
			Not Acce		
Analyte Test	Test Required	Accepta	able (Corrective Act	ion Required)	
Microbiology  E. coli.					
Fecal Coliform, MF or MPN			L L		
Total Coliform, MF or MPN					
Trace Metals					
Aluminum Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Chromium, total		H	-		
Chromium, hexavalent		— H	<del></del>		
Cobalt					
Copper					
Iron	H-			see next 2 pages	
Lead					
Manganese					
Mercury			-		
Mercury (Low Level)		A	_		
Molybdenum					
Nickel					
Selenium					
Silver					
Thallium					
Vanadium					
Zinc					
Demands					
5-day BOD					
5-day Carbonaceous BOD					
COD					
TOC					
Minerals			The same of the sa		
Alkalinity, total (CaCO <sub>3</sub> )					
Chloride					
Fluoride					
Hardness, total (CaCO <sub>3</sub> )		A Design			
Specific conductance (25°C)					
Sulfate					
Total Dissolved Solids (180°C)					
Ammonia as N	N .		· · · · · · · · · · · · · · · · · · ·		
Nitrate as N					
Nitrite as N					
Orthophosphate as P					
Total Kjeldahl-Nitrogen as N					
Total Phosphorus as P					
Misc. Analytes					
Non-Filterable Residue (TSS)					
Oil and Grease	X				
рН	H	<del>P</del>			
Total Cyanide					
Total Phenolics (4-AAP)					
Total Residual Chlorine					
Total Residual Chlorine (Low Level)				1196 94194	
Settleable Solids					
Turbidity	0				
Signature Manager	mo - Jour	Page 16 Date 8	116 2010 Use a separate checklist	f FA CUI  -	



## Corrective Action Report for PE Study Outliers

Note: PE-CARs are now managed by the Corrective Action Committee (CAC). The CAC initiates a PE-CAR after a PE Study failure; the PE-CAR is assigned to a CAC member who begins the investigation and then presents the PE-CAR at the next CAC meeting. After successful completion, which may require analysis of a remedial PE samples, the CAC will issue a finalized copy to the Analyst to be kept on file in their Training Manual.

TOTAL CO	* 4 **	
P H _ 4	. V ID	0031
11.		1111-71

SGS WO#:	S WO#: 1102232 PE Stud		udy:	WP10	-3A	PE R	Report Date:	7/22/2010	
Method #	Test Name	Parameter		Date of Analysis	- Units I		Certified Value	Acceptance Limits	
200.8	Metals Copper 6/10/2010 430		ug/L	378.00	334-422				
After investi	gation of the l	PE anoma	ly, con	aplete the follow	ving:	1 6 -	10.000	334-422	
Transcription	Error?	N		Corrective		N/A			
Calculation E		N	o	Corrective		N/A			
Identification		N	o	Corrective		N/A			
	les compliant?		es	Exception		N/A			
Chromatography or analysis issue?		issue? N	0	Explain:		N/A			

## Corrective Action Plan / Comments:

Copper was reported from of sample 1102232011 in prep batch MXX 23077 and analytical batch MMS 6472 (Analyst Kurt Clarkson and Peer Reviewer Nick Bryant); Cu 65 was reported.

SGS North America Inc.

Prep Method:	200.2	19/00	BSK	imples)		als Preparations Log Analyst: KAN 10 / Batch: MXX 23077
Sample #	Lab Filtered	pH<2	Initial Vol	Initial Wt (g)	Final Vol	Comments
WB	7	799	50,	NIA	25	965852
LCS	1114	- 1		1		965852 965853
(MS) - 11A	AIA					

The calibration meet criteria:

Cu	62,930	Linear Thru Zero	0.0040313	0.9998863
Cu	64.928	Linear Thru Zero	0.0019785	0.9998973

## SGS ALASKA ELAN 6100 ICP-MS P3

Sample ID: 1102232099\

Sample Type: Sample

Sample Description:

Sample Date/Time: Thursday, June 10, 2010 18:27:55

Dataset File: C:\Elandata\DataSet\06.10.2010.p3b\1102232001.075 Method File: C:\elandata\Method\esi fast methods\200.8\_fast.mth

**Dual Detector Mode: Dual** Diluted To Volume (mL): 5.0000 Autosampler Position: 144

			POSICIOII. 144				
	Analyte	Mass	Conc. Mean	Report Unit	Moas, Intens, Mean	Blank Intensity	Meas, Intens, RSD
	C	13		mg/L	11230.238	11670.841	4.243
	CI	37		mg/L	5601799.313	6490161,428	0.901
Γ	LI	7	437.8670	ug/L	68860.371	8.000	4.446
1	Be	9	428.7957	ug/L	23082.557	3.333	3.217
i	В	11	29.4855	ug/L	3319.326	94.667	2.279
1	AI	27	1691.4315	ug/L	1882824.638	1116.075	1,373
1>	Sc	45		ug/L	5413224.419	5738328.000	3.324
Γ	٧	51	4023.1230	ug/L	6828141.996	1682.667	0.849
1	Cr	52	267.8017	ug/L	381233.242	12572.814	1.882
1	Cr	53		ug/L	57203.024	19673.231	1.546
1	Min	55	7609.8708	ug/L	15664199.334	369.342	0.634
1	Co	59	2013.8798	ug/L	3179266.481	29.333	1.331
1	NI	58	2860.5269	ug/L	2376966.725	-1489.302	1.224
1	Ni	60	2976.3032	ug/L	933499.891	17.333	1.991
1	Cu	63	858.9525	ug/L	570844.623	132.001	1.909
1	Cu	65	859.3953	ug/L	280295.527	44.000	1.727

Excerpt from the PRR - Analytical

Copper

OK PS

23077MDOX 1102232011 18:27 171.87908

25

429.7 ug/L

0.31

LCS 965853 (MXX 23077) failed high for lithium (122%), Beryllium (124%), and Bismuth (120%); copper was within QC criteria on the LCS (114%). Bracketing CCVs and CBs pass QC criteria.

Matrix Spike 965854 was spiked off of sample 1102232011 and recovered copper withing QC criteria.

Copper

23077MXX

965854 18:29 521.69864

1554.2 ug/L

0.31

1 112 %REC

1000 1102232011 PASS

If multiple the certified value of by the bias on the LCS (which was within QC criteria) the result is very close to what we reported:

 $378 \text{ ug/L} \times 1.14 = 430.92 \text{ ug/L}$  (Assigned value is 430 ug/L)

#### **Documented Root Cause:**

The acceptance limits for the study set such that the laboratory reported result with the high bias (which was within method criteria) was outside the study acceptance limits.

Initial documentation by:	Sarah Lesowski	Date:	7/29/2010
Initial review CAC:	CAC Meeting	Date:	8/4/2010
Was a remedial PE sample ordered?	Yes (WP10-3-116)	SGS WO#:	1103741

Upon successful completion of a remedial PE sample, the results will be recorded by the CAC:

Method #	Test Name	Parameter	Date of Analysis	Lab Result	Units	Certified Value	Acceptance Limits
EPA 200.8	Metals	Copper	8/05/2010	730	ug/L	704.00	638-772

Final Review by QA Manager:

Stepter C. Ede

Date:

Permittee name

GRANITE POINT TANK FARM State AK NPDES Permit No.

G315001

EPA Lab Code AK00971

## Chemistry/Microbiology Analyte Checklist

DMR-QA Study 30

			Laboratory's Graded Result				
Analyte Test	Test Required		Accep	table	Not Acceptable (Corrective Action Required)		
Microbiology							
E. coli.							
Fecal Coliform, MF or MPN							
Total Coliform, MF or MPN					ſ		
Trace Metals		1000000					
Aluminum							
Antimony							
Arsenic							
Barium							
Beryllium							
Cadmium							
Chromium, total							
Chromium, hexavalent							
Cobalt							
Copper			$\succeq$				
Iron							
Lead							
Manganese			×				
Mercury Mercury (Low Level)			×				
Molybdenum							
Nickel							
Selenium	<del>                                     </del>						
Silver							
Thallium			×				
Vanadium							
Zinc			×				
Demands			<u> </u>				
5-day BOD	П			1			
5-day Carbonaceous BOD							
COD							
TOC							
Minerals							
Alkalinity, total (CaCO <sub>3</sub> )	П			1	F		
Chloride	i ii			1	-	=	
Fluoride						-	
Hardness, total (CaCO <sub>3</sub> )							
Specific conductance (25°C)	H	***************************************				-	
Sulfate		-				- 10000 DEC	
Total Dissolved Solids (180°C)							
Nutrients							
Ammonia as N			×				
Nitrate as N	H				-		
Nitrite as N							
Orthophosphate as P							
Total Kjeldahl-Nitrogen as N							
Total Phosphorus as P				, maconto			
Misc. Analytes					<u>_</u>		
Non-Filterable Residue (TSS)				1.07	T	1	
Oil and Grease	X		X				
pH							
Total Cyanide							
Total Phenolics (4-AAP)							
Total Residual Chlorine							
Total Residual Chlorine (Low Level)							
Settleable Solids							
Turbidity							
Signature m.//www	1- Jany	Pa	ge 16 Date <u>8</u> /	14/2010 Use	separate checklist	for EACH lab used	

# **WET Organisms/Test Conditions/End Points Checklist**

DMR-QA Study 30

Analyte				Laborat	ory's Graded Result
Number	Organisms / Conditions	End Points	Test Required	Acceptable	Not Acceptable (Corrective Action Required
Test Code 1	3/EPA Method 2000				
754	Fathead minnow (Pimephales promelas) - MHSF 25°C	LC50			П
Test Code 1	4/EPA Method 2000				
755	Fathead minnow (Pimephales promelas) - 20% DMW	LC50			П
Test Code 1	5/EPA Method 1000				
756	Fathead minnow (Pimephales promelas) - MHSF	NOEC SURVIVAL	П		
808	Fathead minnow (Pimephales promelas) - MHSF	IC25 (ON) GROWTH			T H
810	Fathead minnow (Pimephales promelas) - MHSF	NOEC (ON) GROWTH		Ħ	
Test Code 1	6/EPA Method 1000				
759	Fathead minnow (Pimephales promelas) - 20% DMW	NOEC SURVIVAL			
812	Fathead minnow (Pimephales promelas) - 20% DMW	IC25 (ON) GROWTH			
814	Fathead minnow (Pimephales promelas) - 20% DMW	NOEC (ON) GROWTH			
Test Code 1	9/EPA Method 2002				
764	Ceriodaphnia dubia - MHSF 25°C	LC50			П
Test Code 2	0/EPA Method 2002				
765	Ceriodaphnia dubia - 20% DMW 25°C	LC50			
Test Code 2	1/EPA Method 1002				
766	Ceriodaphnia dubia - MHSF	NOEC SURVIVAL			
767	Ceriodaphnia dubia - MHSF	IC25 REPRODUCTION	Th	$\overline{}$	
768	Ceriodaphnia dubia - MHSF	NOEC REPRODUCTION	TFT		
Test Code 2	2/EPA Method 1002				
769	Ceriodaphnia dubia - 20% DMW	NOEC SURVIVAL			
770	Ceriodaphnia dubia - 20% DMW	IC25 REPRODUCTION			
771	Ceriodaphnia dubia - 20% DMW	NOEC REPRODUCTION		$\overline{\ }$	
Test Code 3	2/EPA Method 2021				
788	Daphnia magna - MHSF 25°C	LC50			
Test Code 3	8/EPA Method 2021				
794	Daphnia pulex - MHSF 25°C	LC50		П	
Test Code 4	2/EPA Method 2007				
798	Mysid (Mysidopsis bahia) 25°C	LC50			
	3/EPA Method 1007				
799	Mysid (Mysidopsis bahia)	NOEC SURVIVAL			П
816	Mysid (Mysidopsis bahia)	IC25 (ON) GROWTH			i ii
818	Mysid (Mysidopsis bahia)	NOEC (ON) GROWTH		n	П
Test Code 44	4/EPA Method 2006				
803	Inland silverside (Menidia berylina) 25°C	LC50			
Test Code 45	5/EPA Method 1006				
824	Inland silverside (Menidia berylina)	NOEC SURVIVAL	$\boxtimes$	$\boxtimes$	
825	Inland silverside (Menidia berylina)	IC25 (ON) GROWTH		$\boxtimes$	
826	Inland silverside (Menidia berylina)	NOEC (ON) GROWTH	X	X	
Test Code 46	5/EPA Method 2004			K-N	
304	Sheepshead minnow (Cyprinodon variegatus) 25°C	LC50	П	П	
Test Code 47	7/EPA Method 1004				
305	Sheepshead minnow (Cyprinodon variegatus)	NOEC SURVIVAL			П
320	Sheepshead minnow (Cyprinodon variegatus)	IC25 (ON) GROWTH		<del>- Н</del>	H
322	Sheepshead minnow (Cyprinodon variegatus)	NOEC (ON) GROWTH	Ti-	Ħ	
Name	MARILU MORENO-JONES Sign	nature mulin	(-		Date 8/11/200

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